

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 1-66, 71 and 78-84 and add new claims 85-93 as follows:

Listing of Claims:

1-66. (Cancelled)

67. (Original) A method for controlling conditioning of a planarizing medium used for planarizing a microelectronic substrate, the method comprising:

engaging a conditioning body with the planarizing medium and moving at least one of the conditioning body and the planarizing medium relative to the other of the conditioning body and the planarizing medium while the conditioning body engages the planarizing medium;

detecting a frictional force between the conditioning body and the planarizing medium; and

controlling at least one of a force between the conditioning body and the planarizing medium and a speed of the conditioning body relative to the planarizing medium in response to detecting the frictional force between the conditioning body and the planarizing medium.

68. (Original) The method of claim 67 wherein controlling a force between the conditioning body and the planarizing medium includes receiving a force signal from a force sensor and transmitting a command signal to an actuator coupled to the conditioning body.

69. (Original) The method of claim 68 wherein receiving the force signal includes receiving the force signal with a microprocessor and transmitting a command signal includes transmitting the command signal from the microprocessor.

70. (Original) The method of claim 67 wherein controlling a force includes adjusting a force on the conditioning body that is approximately normal to a planarizing surface of the planarizing medium.

71. (Cancelled)

72. (Original) The method of claim 67 wherein controlling a speed of the conditioning body relative to the planarizing medium includes moving the conditioning body radially relative to the planarizing medium.

73. (Original) The method of claim 68 wherein controlling a speed of the conditioning body includes rotating at least one of the conditioning body and the planarizing medium relative to the other about an axis generally normal to the planarizing medium.

74. (Original) A method for monitoring a polishing pad used for planarizing a microelectronic substrate, the method comprising:

engaging a conditioning body with a planarizing surface of the polishing pad;

applying a force to the polishing pad via the conditioning body;

moving at least one of the polishing pad and the conditioning body relative to the other of the polishing pad and the conditioning body; and

detecting a frictional force of the polishing pad on the conditioning body in a plane of the planarizing surface.

75. (Original) The method of claim 74 wherein applying a force includes applying a force to the conditioning body different than a weight of the conditioning body.

76. (Original) The method of claim 74 wherein the force is a first force, further comprising conditioning the polishing pad by applying a second force to the conditioner greater than the first force to remove material from the planarizing surface of the polishing pad.

77. (Original) The method of claim 74 wherein the polishing pad is a first polishing pad and the frictional force is a first frictional force, further comprising:
applying a force to a second polishing pad via the conditioning body;
moving at least one of the second polishing pad and the conditioning body relative to the other of the second polishing pad and the conditioning body;
detecting a second frictional force of the second polishing pad on the conditioning body in a plane of the planarizing surface; and
comparing the first and second frictional forces.

78-84. (Cancelled)

85. (New) A method for controlling conditioning of a continuous planarizing medium used for planarizing a microelectronic substrate, the method comprising:
positioning the continuous planarizing pad around a pair of spaced apart rollers to define a first planarization station and an opposing second planarization station;
engaging a conditioning body with the continuous planarizing pad proximate to at least one of the first planarization station and the opposing second planarization station and moving at least one of the conditioning body and the continuous planarizing medium relative to the other while the conditioning body contacts the continuous planarizing medium;
detecting a frictional force between the conditioning body and the continuous planarizing medium; and
controlling at least one of a force between the conditioning body and the continuous planarizing medium and a speed of the conditioning body relative to the continuous planarizing medium in response to detecting the frictional force between the conditioning body and the planarizing medium.

86. (New) The method of claim 85, wherein at least one of a force between the conditioning body and the continuous planarizing medium comprises receiving a first signal corresponding to the frictional force and transmitting a second signal to an actuator coupled to the conditioning body.

87. (New) The method of claim 86, wherein receiving the first signal comprises receiving the first signal with a microprocessor and wherein transmitting the second signal comprises transmitting the second signal from the microprocessor.

88. (New) The method of claim 85, wherein controlling at least one of a force between the conditioning body and the continuous planarizing medium comprises applying a force to the conditioning body that is approximately normal to a planarizing surface of the planarizing medium.

89. (New) The method of claim 85, wherein controlling a speed of the conditioning body relative to the continuous planarizing medium further comprises controlling a rotational speed of the spaced apart rollers.

90. (New) The method of claim 85, wherein positioning the continuous planarizing pad around a pair of spaced apart rollers further comprises supporting the continuous planarizing pad with a continuous support band.

91. (New) The method of claim 85, wherein positioning the continuous planarizing pad around a pair of spaced apart rollers further comprises positioning a first platen proximate to the first planarization station and positioning a second platen proximate to the second planarization station.

92. (New) The method of claim 91, wherein positioning the continuous planarizing pad around a pair of spaced apart rollers further comprises positioning a first carrier supporting a first substrate adjacent to the first platen and positioning a second carrier supporting a second substrate adjacent to the second platen and wherein engaging a conditioning body with the continuous planarizing pad further comprises contacting the continuous planarizing medium with the conditioning body while the first substrate and the second substrate are in contact with the planarizing pad.

93. (New) The method of claim 91, wherein positioning the continuous planarizing pad around a pair of spaced apart rollers further comprises positioning a first carrier supporting a first substrate adjacent to the first platen and positioning a second carrier supporting a second substrate adjacent to the second platen and wherein engaging a conditioning body with the continuous planarizing pad further comprises contacting the continuous planarizing medium with the conditioning body while the first substrate and the second substrate are not in contact with the planarizing pad.